

What is claimed is:

1. A microcapsule comprising a disperse system, in which a colored particle is dispersed in an oil phase, and a wall encapsulating the disperse system, wherein the wall is formed by a resin having an acid group or a salt thereof.
2. A microcapsule according to claim 1, wherein the resin comprises a polymer, in the free acid form, having an acid value of 20 to 400 mgKOH/g.
3. A microcapsule according to claim 1, wherein the resin constituting the wall is crosslinked or cured.
4. A microcapsule according to claim 1, wherein the resin constituting the wall has a self-crosslinkable group, or a crosslinkable group to a reactive group of the resin, or a crosslinking agent.
5. A microcapsule according to claim 1, wherein the disperse system comprises an electrically insulating dielectric fluid, and a single kind or plural kinds of colored particle(s) dispersed in the dielectric fluid.
6. A microcapsule according to claim 1, wherein the colored particle is charged in the oil phase for moving electrophoretically in the microcapsule by a potential difference or an electromotive force.
7. A microcapsule according to claim 1, wherein the mean particle size of the colored particle is 10 to 500 nm, the mean particle size of the microcapsule is 1

to 1000 μm , and the mean thickness of the microcapsule wall is not more than 2 μm .

8. A microcapsule according to claim 1, which is interposed between a pair of electrodes, for displaying
5 an image by electrophoresis of the colored particle.

9. A process for producing a microcapsule which comprises

a step for preparing a liquid organic dispersion containing a resin whose acid group has been neutralized,
10 a colored particle, and an organic solvent;

a step for dispersing the liquid organic dispersion in an aqueous medium to produce a capsule particle in the aqueous medium, the capsule particle comprising a disperse system in which the colored particle is dispersed in the
15 organic solvent, and a wall encapsulating the disperse system; and

a step for separating the capsule particle from the aqueous medium for dryness to obtain a microcapsule encapsulating the disperse system.

20 10. A process according to claim 9, wherein the liquid organic dispersion is dispersed in the aqueous medium by emulsification or phase inversion emulsification.

11. A process according to claim 9, which
25 comprises crosslinking or curing the resin constituting the wall.

12. A process according to claim 9, wherein the

liquid organic dispersion is dispersed in the aqueous medium, in which the liquid organic dispersion comprises, as an organic solvent, a hydrophobic organic solvent and a polar solvent dissolving the resin constituting the wall
5 and being miscible to the aqueous medium.

13. A process according to claim 9, which comprises

a step for neutralizing the acid group of the resin in a polar solvent dissolving the resin constituting the
10 wall and being miscible to the aqueous medium for obtaining a resin solution;

a step for mixing the resin solution obtained by said neutralization step with a coloring agent to prepare a liquid organic dispersion;

15 a step for dispersing the liquid organic dispersion in the aqueous medium to produce an aqueous liquid dispersion containing a capsule particle;

a step for crosslinking or curing the wall of the capsule particle in the aqueous medium; and

20 a step for separating the capsule particle from the aqueous medium for dryness.

14. A process according to claim 9 or 13, wherein the resin constituting the wall of the capsule particle is crosslinked or cured with a crosslinking agent.

25 15. A process according to claim 9 or 13, wherein the resin constituting the wall is crosslinked or cured with a crosslinking agent, and then the unreacted

crosslinking agent is further crosslinked or cured with
a polyfunctional compound.